Comments in MB Docket 17-105

Modernization of Media Regulation

I am filing these comments as a broadcast engineer with 30 years' experience, holding a BS in Electrical Engineering from Rensselaer Polytechnic Institute, and as a technical consultant and founder of AM, FM, and NCE radio stations. I have filed scores of applications that have been granted by the Commission. The following two suggestions are intended to facilitate improved service to the public by broadcast stations.

1. <u>Section 73.316(a)</u>. Allow vertical-only polarization in the non-reserved band. V-only is still permitted in the reserved band because it helps facilitate protection of nearby television Channel 6. It is also permitted for Class D facilities such as FM translators. However, it is prohibited in the non-reserved band, where only horizontal and H&V or circular polarization are permitted in the non-reserved band.

The prohibition of V-only dates back about half a century to when V-polarization was a new and untried concept in the FM band. This prohibition is no longer necessary and today does not make sense. There are no known drawbacks or problems created by V-only. Field experience suggests that V-only is superior to H-only on many car radios, given receive antenna orientation. As a practical matter in the field, for propagation over varying terrain and penetration of service areas, V-only signals have often been shown to be superior to H-only. Importantly, as well, radio stations can reduce their energy consumption by half if they are permitted to employ V-only.

2. Sections 73.215(a) and 73.509 Contour Protection. Remove or loosen the prohibition on received interference. Class A, B, and C (and subcategory) broadcast stations are considered primary facilities, whereas Class D FM translator are secondary. Nevertheless, recent experience with FM translators is illustrative and predictive of the fact that the absence of a prohibition on incoming interference received by a facility is not harmful to the public interest. In the case of NCE and commercial broadcast stations, the removal of this prohibition would, in many cases, facilitate a significant expansion in area and population coverage, and enhancing service to the general public.

In response to the 2007 NCE filing window, this commenter founded two NCE facilities that were seriously constrained from optimizing service by this counterproductive and essentially useless rule provision.

WPUT at North Salem, NY (Facility ID 175564) is a facility that does not come close to creating interference to any other facility. However, incoming interference is another matter. The provisions of 73.314 notwithstanding, relatively rugged terrain that has the effect of reducing received interference below the predicted levels. To this day, contour locations are determined by the antiquated method prescribed in 73.333, when average terrain had to be painstakingly calculated by hand by averaging 80 points taken at 0.1 mile intervals on each of eight cardinal radials plotted on a USGS topographical map. The technique probably dates back to the 1950s or earlier.

WPUT coverage remains constrained to the west, north, and east by the fact that it's 60 dBu F(50,50) contour may not overlap the 40 dBu F(50,10) interfering contours of co-channel facilities WMFU to west, WGSK to the north, and WRXC to the east. As a result, the WPUT 60 dBu service contour is limited to only 13,352 persons. With an ideal antenna site location and directional pattern, this could be increased to 17,176 persons. Absent the prohibition on received interference, or even with a 10 dB increase in allowed interference to the WPUT 60 dBu service contour (i.e. 50 dBu rather than 40 dBu), this could be increased to 66,460 persons. This represents a nearly 500% improvement in present coverage, and a 387% increase in theoretical coverage optimized under current rules.

WMVY at Edgartown, MA (Facility ID 175715) is another facility with which this commenter has similar experience. Under the original call sign "WMEX," the applicant requested a waiver of 73.509 to permit it receive theoretical interference from co-channel WJMF in Smithfield, RI over a forever wild, poison-ivy-laden, uninhabited portion of an island that is held in perpetuity by a private trust. (See BMPED-20110512AAA dismissed 5/31/2012.) The waiver was presumably grantable over water, despite the fact that, especially in Summer, countless persons are aboard boats located in the alleged interference area. But not over 5.8 sq. km. of uninhabited land. Where is the sense in that? Where is the public interest?

Nevertheless, as a result of precedents that were in many ways dissimilar to the request, and due to the staff's lack of freedom to break with precedent, the request was dismissed.

WMVY remains the only locally staffed, locally operated full facility on this isolated island, which iself can only be reached by boat. The station is the only immediate local source of emergency and other important local information. Yet the facility remains unable to serve the western, or "up-island" areas of Martha's Vineyard. Absent the prohibition on received interference over a tiny area of an uninhabited island in the middle of Buzzards Bay, the station could serve the entire island of Martha's Vineyard.

The Waiver Request and Letter Of Dismissal are contained in Attachments 1 and 2...

Respectfully submitted,

Dennis Jackson Owner/Founder

WCLX, WPUT, WQQQ, and WRIP

WMEX (now WMVY) Exhibit In Support Of Request For Partial Waiver Of Section 73.509

The proposed 60 dBu service contour would receive interference from the facilities authorized (but unbuilt) for WJMF at Smithfield, RI (File No. BMPED-20090824AGX) the over the islands of Naushon and Pasque in the relatively remote Elizabeth Islands chain in Buzzards Bay off the south coast of Massachusetts. No interference to either existing or proposed facilities would be created.

The total area of overlap is 38.75 km, as shown in Figure 1 below. Approximately 85% of the overlap occurs over the waters of Buzzards Bay and Vineyard Sound. The remaining 15% of overlap that occurs on land only represents about 5.8 sq km.

The proposed coverage area if the requested waiver is granted will be increased from 597.7 sq km to 979.2 sq km. This is a gain of 381.5 km and represents a 63.8% increase in area covered. The gain area is 985% of the total area where overlap would occur, and approximately 6,563% of the land area where overlap would occur. The 5.8 sq km represents 0.6% of the proposed coverage area and 1.5% of the gain area. (Although not all of the coverage area is over land, of course.)

Most importantly, as regards the public interest, the population served within the proposed 60 dBu service contour would be increased from 22,043 to 36,702. This represents a 66.5% increase with an additional 14,659 persons served. Yet not a single person would receive interference, as described more fully below.

Both Naushon and Pasque are privately owned and development is not permitted. Please see the letter from Paul Elias, Trustee in Exhibit 2 below, and aerial views of the two islands in Exhibits 3. Since 100% of the overlap area over these two islands falls in uninhabited areas, the population contained within the contour union is zero persons.

Naushon Island is 8.9 km long. It is privately owned by the Forbes Naushon Trust and is not open to the public except for three beach areas that may be visited by boat. It contains approximately 20 residents, some of whom reside full time. However, all of these residents reside on the northeast tip of the island where no overlap would occur. There are no residents or structures in the overlap area.

Pasque Island is 2.4 km long and is privately owned by a subset of the Forbes family. It is entirely uninhabited and not open to the public. It is covered in poison ivy, thus rendering it inhospitable and hazardous to visitors, as well as uninhabitable.

The applicant submits that there is little difference - if any - between overlap over water, for which waivers are routinely granted, and overlap over very small unpopulated and unbuildable portions of remote privately held islands. In neither case is any population affected, so the difference is de minimus and hardly significant.

The applicant submits that a grant of such a waiver would be in the public interest, and hereby respectfully requests that the Commission please grant an appropriate waiver of Section 73.509.

Exhibit 1

Request for Waiver of Section 73.509 Overlap

Overlap Received From WJMF CP Lies Over Water and Unpopulated Island Areas

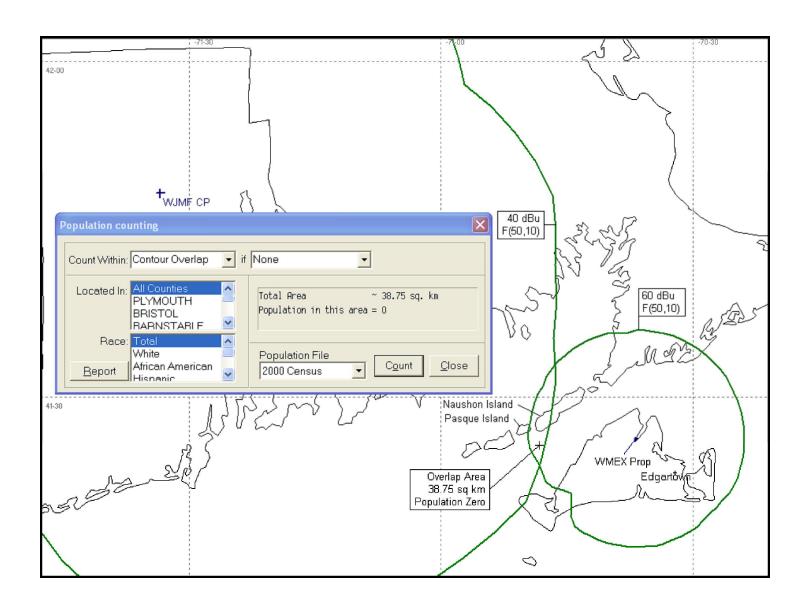


Exhibit 2

NAUSHON TRUST, INC.

C/O J. M. FORBES & CO. LLP 3 POST OFFICE SQUARE — 10TH FLOOR BOSTON, MASSACHUSETTS 02109 3903

TEL 617 423 5705 FAX 617 423 6656

May 18, 2011

Dennis Jackson Vineyard Public Radio 19 Boas Lane Wilton, CT 06897-1301

Dear Mr. Jackson,

I have examined the map showing 38.75 sq km of overlap between the proposed WMEX service contour and the interfering contour from WJMF CP (File No. BMPED-20090824AGX.) There are no residential structures and there is no resident population within the overlap area on either Naushon Island or Pasque Island. Further, there are restrictions to prevent any current and future residential development on these islands.

Sincerely,

Paul Elias

Managing Trustee Naushon Trust, Inc.

Exhibit 3A – Pasque Island



Exhibit 3B – Naushon Island (overview)

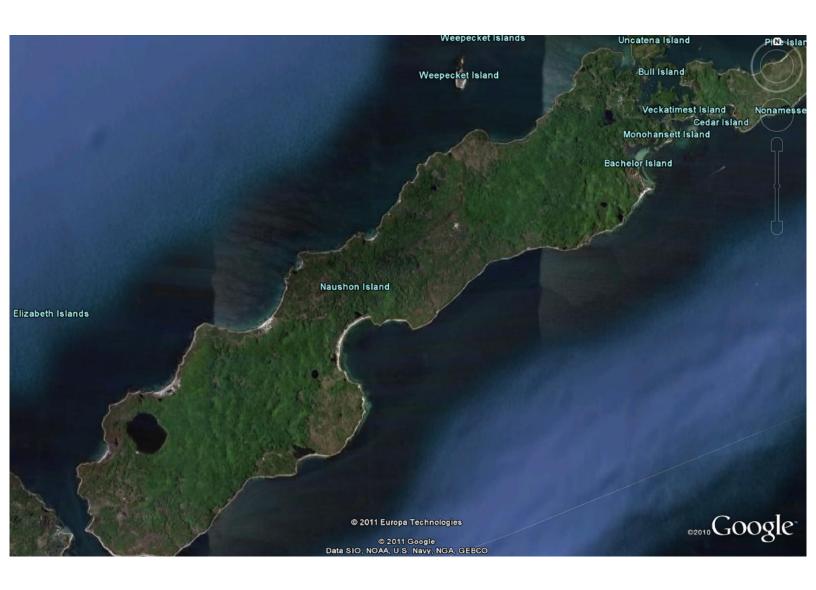


Exhibit 3C - Naushon Island (west end)



Exhibit 3D - Naushon Island (west center)



Exhibit 3E - Naushon Island (east center)

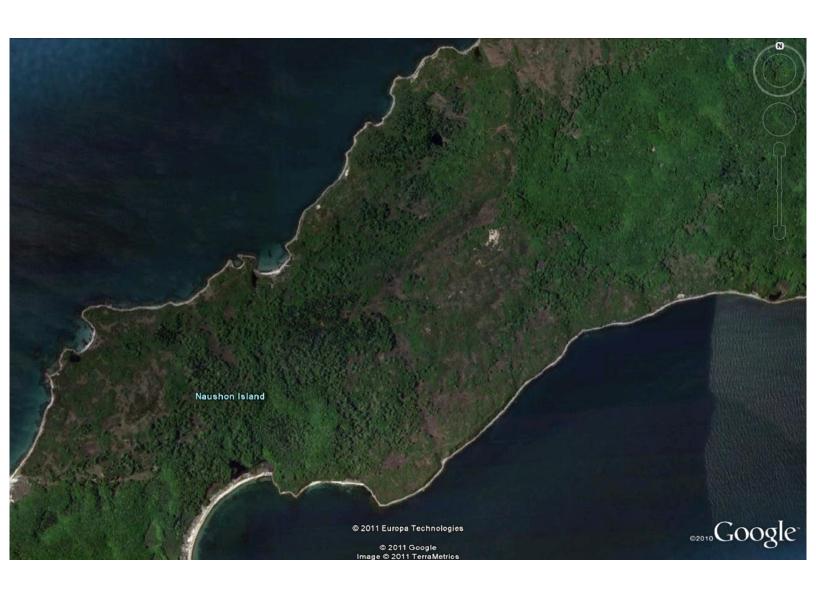


Exhibit 3F - Naushon Island (northeast end)

Showing the only residences or structures on the island.



Attachment 2 - Dismissal Letter

FEDERAL COMMUNICATIONS COMMISSION 445 TWELFTH STREET, SW WASHINGTON, DC 20554

JUN 0 1 2812

MEDIA BUREAU AUDIO DIVISION

APPLICATION STATUS: (202) 418-2730 HOME PAGE: WWW.FCC.GOV/MB/AUDIO

Vineyard Public Radio 4 Linden Street Winchester, MA 01890 PROCESSING ENGINEER: Tung Bui TELEPHONE: (202) 418-2778 FACSIMILE: (202) 418-1410

MAIL STOP: 1800B3 INTERNET ADDRESS: tung.bui@fcc.gov

In re:

WMEX(FM), Edgartown, MA

Facility ID No.: 175715

Vineyard Public Radio ("Vineyard")

BMPED-20110512AAA

Dear Applicant:

This refers to the above-captioned minor change application, as amended on May 24, 2011, to increase the authorized effective radiated power ("ERP") from 0.4 kilowatt to 1.0 kilowatt. Vineyard also requests waiver of the contour overlap provisions of 47 C.F.R Section 73.509. For the reasons stated below, we deny the waiver request and dismiss the application.

Waiver Request. An engineering study of the application reveals that it is in violation of Section 73.509 with respect to co-channel Class A authorized facility (BMPED-20090824AGX) for WJMF(FM), Smithfield, RI. Specifically, the proposed protected contour (60 dBu) would receive prohibited overlap from the interfering contour (40 dBu) of WJMF. Vineyard recognizes this violation and requests waiver of Section 73.509.

In support of the waiver request, Vineyard states that it will not cause interference to WJMF. Vineyard claims that the proposed facilities would provide a net increase of its overall coverage area by 382 square kilometers (a 64% increase). Furthermore, Vineyard claims that the proposed facilities will provide new service to an estimated 36,702 persons, which is an increase of 67%. Vineyard indicates that the overlap area consists of areas of Naushon and Pasque Islands which are uninhabited, and the population contained within the contour overlap is zero persons. Moreover, Vineyard states that both the Naushon and Pasque Islands are privately owned and residential development is not permitted. Finally, Vineyard believes that there is little difference between overlap over water, which is allowed, and overlap over small unpopulated islands. Vineyard considers the affected area to be *de minimis* and when considered along with the increased service area, Vineyard concludes that waiver of Section 73.509 is warranted in this case.

Discussion. While the area of overlap currently may be undeveloped, lack of population alone is not sufficient to waive this core interference protection requirement. Also, while Vineyard contends that the islands are privately owned and that development is unlikely, it can not be definitively concluded that residential establishments will not ever exist in that area in the future. In any event, Section 73.509 specifically addresses overlap area rather than the population in the

overlap area. Furthermore, Vineyard fails to demonstrate that any readily available rule compliant technical solution, like a directional antenna, could not be used to eliminate the prohibited overlap. Moreover, Vineyard has not cited any published decisions where the Commission granted a waiver under circumstances similar to the ones presented here.

Allowing applicants to create new prohibited contour overlap effectively nullifies the protection mandated by Section 73.509 to noncommercial educational FM stations' 60 dBu protected service areas. In particular, the affected station would lose service area and population served without receiving any benefit in return. This interference interrupts the continuity of service provided by WMEX throughout its protected service area, and thus diminishes the quality of FM service provided by the afflicted station. Over time, the grant of numerous similar waivers would degrade the quality of FM reception from stations throughout the entire noncommercial educational FM band. As the Commission stated in *Open Media Corp.*, 8 FCC Rcd at 4070, 4071:

It is the overall scheme of [noncommercial educational FM] allocations which is paramount, and when faced with a choice between a larger service area with overlap received on one hand, and lesser coverage with no prohibited overlap on the other, the Commission favors the latter. See Educational Information Corporation, 6 FCC Rcd 2207, 2208 (1991)

Further, it is the Commission's charge, not applicants or licensees, to establish definitions of protected service and to ensure that protected service does not suffer interference. The goal of Section 73.509 is to prevent overcrowding of FM stations and provide a consistent, fair, efficient, and equitable distribution of FM facilities as required by Section 307(b) of the Communications Act.¹

The Commission has granted waivers of Section 73.509 where existing noncommercial educational stations sought to increase the 60 dBu service contour so as to overlap the interfering contour of another noncommercial educational station and thereby receive overlap from second-adjacent and third adjacent noncommercial educational FM stations. See Educational Information Corp., 6 FCC Rcd 2207 (1991). Here, Vineyard proposes to create new overlap received from a co-channel station. Therefore, the requested waiver of Section 73.509 does not fall within that precedent. Accordingly, the applicant's request for waiver of 47 C.F.R. Section 73.509 will be denied.

Conclusion. The Commission's rules may be waived only for good cause shown.² An applicant seeking a rule waiver has the burden to plead with particularity the facts and circumstances that warrant such action.³ The Commission must give waiver requests "a hard look," but an applicant

¹ See Amendment of Part 73 of the Commission's Rules to Permit Short-Spaced FM Station Assignments by Using Directional Antennas, 6 FCC Rcd 5356, 5358 (1991) (para. 13).

² 47 C.F.R. § 1.3.

³ See Columbia Communications Corp. v. FCC, 832.F.2d 189, 192 (D.C. Cir, 1987) (citing Rio Grande Family Radio Fellowship, Inc. v. FCC, 406 F.2d 644, 666 (D.C. Cir. 1968)).

for waiver "faces a high hurdle even at the starting gate" and must support its waiver request with a compelling showing. The Commission may exercise its discretion to waive a rule where the particular facts make strict compliance inconsistent with the public interest. In addition, the Commission may take into account considerations of hardship, equity, or more effective implementation of overall policy on an individual basis. However, waiver of the Commission's rules is appropriate only if both (i) special circumstances warrant a deviation from the general rule, and (ii) such deviation will serve the public interest. Vineyard's request fails to present good cause for waiver of Section 73.509. Vineyard has not shown sufficiently unique "special" circumstances, i.e., rare and exceptional circumstances beyond its control to justify a waiver of Section 73.509. Finally, we find that the facts and circumstances set forth in the justification are insufficient to establish that granting waiver of Section 73.509 would be in the public interest.

In light of the above, Vineyard's request for waiver of Section 73.509 IS HEREBY DENIED. Furthermore, Application File No. BMPED-20110512AAA, as amended on May 24, 2011, being unacceptable for filing, IS HEREBY DISMISSED. This action is taken pursuant to Section 0.283 of the Rules.

Sincerely,

Rodolfo F. Bonacci

510/20 J. B

Assistant Chief

Audio Division

Media Bureau

cc: Dennis Jackson, Engr.

⁴ See WAIT Radio v. FCC, 418 F.2d 1153, 1157 (D.C. Cir. 1969), aff'd, 459 F.2d 1203 (1972), cert. denied, 93 S.Ct. 461 (1972) ("WAIT Radio"). See also Thomas Radio v. FCC, 716 F.2d 921, 924 (D.C. Cir. 1983).

⁵ Greater Media Radio Co., Inc., Memorandum Opinion and Order, 15 FCC Rcd 7090 (1999) (citing Stoner Broadcasting System, Inc., Memorandum Opinion and Order, 49 FCC 2d 1011, 1012 (1974)).

Northeast Cellular Telephone Co. v. FCC, 897 F.2d 1164, 1166 (D.C. Cir. 1990) ("Northeast Cellular").

WAIT Radio, 418 F.2d at 1159; Northeast Cellular, 897 F.2d at 1166.

Network IP, LLC v. FCC, 548 F.3d 116, 125-128 (D.C. Cir. 2008) ("Network IP"); Northeast Cellular, 897 F.2d at 1166.